

(A) a mining, metallurgical, or mineral engineering program or department accredited by the Accreditation Board for Engineering and Technology, Inc. that is located at an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)); and

(B) a geology or engineering program or department that is located at an institution of higher education (as so defined) located in a State the gross domestic product of which in 2020 was not less than \$1,000,000,000 in the category "Mining, quarrying, and oil & gas extraction", according to the Bureau of Economic Analysis.

(4) SECRETARY.—The term "Secretary" means the Secretary of Energy.

(5) STATE.—The term "State" means—

- (A) a State;
- (B) the District of Columbia;
- (C) the Commonwealth of Puerto Rico;
- (D) Guam;
- (E) American Samoa;
- (F) the Commonwealth of the Northern Mariana Islands; and
- (G) the United States Virgin Islands.

(b) GRANT PROGRAM.—

(1) IN GENERAL.—The Secretary, in coordination with the Secretary of the Interior, shall establish a competitive grant program under which the Secretary shall award grants to mining schools.

(2) USE OF FUNDS.—A mining school receiving a grant under paragraph (1) shall use the grant funds to carry out a study, research project, or demonstration project relating to the production of critical minerals, including relating to—

(A) enhancing and supporting mining and mineral engineering programs at mining schools;

(B) mining, mineral extraction efficiency, and related processing technology;

(C) reclamation technology and practices for active mining operations;

(D) the development of remining systems and technologies that facilitate reclamation that fosters the recovery of resources at abandoned mine sites;

(E) critical mineral extraction methods that reduce environmental and human impacts;

(F) technologies to extract, refine, separate, melt, or produce rare earth elements;

(G) reducing dependence on foreign energy and mineral supplies through increased domestic critical mineral production;

(H) enhancing the competitiveness of United States energy and mineral technology exports;

(I) the extraction or processing of coinciding mineralization, including rare earth elements, within coal, coal processing by-product, overburden or coal residue;

(J) enhancing technologies and practices relating to mitigation of acid mine drainage, reforestation, and revegetation in the reclamation of land and water resources adversely affected by mining;

(K) enhancing exploration and characterization of new or novel deposits, including rare earth elements and critical minerals within phosphate rocks, uranium bearing deposits, and other non-traditional sources;

(L) meeting challenges of extreme mining conditions, such as deeper deposits or offshore or cold region mining; and

(M) mineral economics, including analysis of supply chains, future mineral needs, and unconventional mining resources.

(c) PUBLIC PARTICIPATION.—In carrying out this section, the Secretary shall—

(1) consult with relevant stakeholders; and

(2) provide to undergraduate and graduate students at mining schools significant opportunities for participation.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to

carry out this section \$10,000,000 for each of fiscal years 2022 through 2026.

**SA 1536.** Mr. BARRASSO (for himself, Ms. MURKOWSKI, and Ms. LUMMIS) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title III of division C, add the following:

**SEC. 3314. GLOBAL COOPERATIVE FRAMEWORK TO END HUMAN RIGHTS ABUSES IN SOURCING CRITICAL MINERALS.**

(a) IN GENERAL.—The Secretary of State shall seek to convene a meeting of foreign leaders to establish a multilateral framework to end human rights abuses, including the exploitation of forced labor and child labor, related to the mining and sourcing of critical minerals.

(b) CERTIFICATION SCHEME.—The Secretary shall seek to ensure that the framework under subsection (a) includes a certification scheme, comprised of—

(1) minimum requirements for national legislation, institutions, and import and export controls related to the sourcing of critical minerals;

(2) measures to enforce transparency in the exchange of production, transportation, and end-use manufacturing data related to critical minerals, including through the use of blockchain technology, if feasible;

(3) prohibitions on the purchase or trade in critical minerals unless parties to the purchase or trade are certified under and in compliance with the framework; and

(4) measures to certify shipments as in compliance with the framework, including requiring the provision of supporting documentation.

(c) IMPLEMENTATION REPORT.—The Secretary shall lead the development of an annual global report on the implementation of the framework under subsection (a), including progress and recommendations to fully end human rights abuses, including the exploitation of forced labor and child labor, related to the extraction of critical minerals around the world.

(d) REVIEW OF CONFLICT MINERALS LIST.—The Secretary shall review the list of conflict minerals under section 1502(e)(4) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Public Law 111-203; 124 Stat. 228) to determine whether certain critical minerals, such as cobalt, should be included on the list.

(e) CRITICAL MINERAL DEFINED.—In this section, the term "critical mineral" has the meaning given the term in section 7002(a) of the Energy Act of 2020 (division Z of Public Law 116-260; 30 U.S.C. 1606(a)).

**SA 1537.** Mr. BARRASSO submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation,

manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of division F, add the following:

**TITLE IV—AMERICAN CRITICAL MINERAL INDEPENDENCE**

**SEC. 6401. DEFINITIONS.**

In this title:

(1) BYPRODUCT.—The term "byproduct" has the meaning given the term in section 7002(a) of the Energy Act of 2020 (30 U.S.C. 1606(a)).

(2) CRITICAL MINERAL.—The term "critical mineral" has the meaning given the term in section 7002(a) of the Energy Act of 2020 (30 U.S.C. 1606(a)), except that the term shall not exclude materials described in paragraph (3)(B)(iii) of that section.

(3) CRITICAL MINERAL PROJECT.—The term "critical mineral project" means a project—

- (A) located on—
  - (i) a mining claim, millsite claim, or tunnel site claim for any locatable mineral;
  - (ii) land open to mineral entry; or
  - (iii) a Federal mineral lease; and
- (B) for the purpose of producing a critical mineral, including—

(i) as a byproduct, or a product of a host mineral, or from tailings; or

(ii) through an exploration project with respect to which the presence of a byproduct is a reasonable expectation, based on known mineral companionship, geologic formation, mineralogy, or other factors.

(4) INDIAN TRIBE.—The term "Indian Tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(5) LEAD AGENCY.—The term "lead agency" means the agency with primary responsibility for issuing a mineral exploration or mine permit for a project.

(6) MINERAL EXPLORATION OR MINE PERMIT.—The term "mineral exploration or mine permit" means—

(A) an authorization of the Bureau of Land Management or the Forest Service, as applicable, for a premining activity that requires analysis under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(B) a plan of operations issued by the Bureau of Land Management or the Forest Service; and

(C) a permit for a project located in an area for which a hardrock mineral permit or lease is available.

(7) SECRETARY.—The term "Secretary" means the Secretary of Energy.

(8) STATE.—The term "State" means—

- (A) a State;
- (B) the District of Columbia;
- (C) the Commonwealth of Puerto Rico;
- (D) Guam;
- (E) American Samoa;
- (F) the Commonwealth of the Northern Mariana Islands; and
- (G) the United States Virgin Islands.

**Subtitle A—Rare Earth Elements and Critical Minerals Processing Technologies**

**SEC. 6411. RARE EARTH ELEMENTS AND CRITICAL MINERALS PROCESSING TECHNOLOGIES.**

(a) RESEARCH PROGRAM FOR THE RECOVERY OF CRITICAL MINERALS.—

(1) IN GENERAL.—The Secretary, in consultation with the Secretary of the Interior, shall carry out a grant program to research, develop, and assess advanced processing technologies and techniques for—

(A) the extraction, refining, separation, melting, or production of critical minerals, including rare earth elements; and

(B) the extraction of critical minerals, including rare earth elements, from various